The strategies of alcohol industry SAPROs : Inaccurate information, misleading language and the use of confounders to downplay and misrepresent the risk of cancer

Petticrew, Mark

2018-03

Petticrew , M , Hessari , N M , Knai , C & Weiderpass , E 2018 , ' The strategies of alcohol industry SAPROs : Inaccurate information, misleading language and the use of confounders to downplay and misrepresent the risk of cancer ' , Drug and Alcohol Review , vol. 37 , no. 3 , pp. 313-315 . https://doi.org/10.1111/dar.12677

http://hdl.handle.net/10138/234404
https://doi.org/10.1111/dar.12677

Drug and Alcohol REVIEW
APSAD
Drug and Alcohol Review (March 2018), 37, 313–315
DOI: 10.1111/dar.12677

COMMENTARY

The strategies of alcohol industry SAPROs: Inaccurate information, misleading language and the use of confounders to downplay and misrepresent the risk of cancer

We start by summarising our core findings, to contextualise the rest of our response. These are that alcohol industry social aspects/public relations organisations (SAPRO) dispute in different ways the risk of cancer from alcohol consumption, particularly breast cancer, and to some extent colorectal cancer [1]. When some risk is acknowledged, that risk is often presented in conjunction with a range of other potential confounders, thus undermining the evidence that there is an independent relationship. Smoking is sometimes used to imply that the risk is confined to smokers. Not all these strategies are used by all these (or other) SAPROs, all the time.

Several of the responses to our paper state that the relevant organisation does, in fact, include accurate information about cancer on their websites or documents, along with explicit statements about increased risk. We did not claim that all the information on these websites is inaccurate or misleading. In fact, in many cases accurate information is included, while at the same time inaccurate information is presented elsewhere. Thus, accurate information may be framed in such a way that it is simultaneously undermined. For example, Éduc'alcool's publication 'Alcohol and Women' does have a clear statement about the risk of breast cancer, as they say in their letter. However this needs to be seen alongside their inaccurate statement (which we cited) that '*no causal relationship has been shown between moderate drinking and breast cancer*'. Presenting a mix of accurate and misleading or distracting information potentially sows doubt about the well-evidenced relationship between alcohol consumption and cancer.

One justification made by SAPROs for presenting information about a host of confounders is that it is their duty to present a complete picture about alcohol and health. We think that this is a weak justification for proffering a range of generic advice about unmodifiable confounders, hormone environments, genetic risks, ageing and so on. It is doubtful that the public turns to such websites for generic lifestyle information, or information about childbirth, or breastfeeding. The argument we made in the paper is that the inclusion of a wide range of potential confounders, and risk/protective factors, has similarities to well-documented tobacco industry strategies. These involved highlighting the complexity of the aetiology of lung cancer and coronary heart disease, thereby undermining the epidemiological evidence of a clear, independent relationship.

Our analysis also highlighted the selective omission of breast cancer from some SAPRO materials. The Drinkaware Fact sheet 'Alcohol and Young people' stated (in a section headed 'Liver Disease') that 'In the long-term, drinking above the lower-risk guidelines can also lead to cancers, such as bowel and liver cancer, heart disorders and impotence for men', without mentioning breast cancer. The opening sentences of their 'Alcohol and Cancer' fact sheet (both factsheets downloaded in August 2016) also appears to emphasise uncertainty, without actually mentioning alcohol:

> "There is no scientific consensus on why some people develop cancer and others don't. Your genes and your lifestyle choices interact, and together they make up your risk of developing cancer."

The Drinkaware example is one example which we cited in relation to confounding, but it is not (contrary to their letter) the only example we included from this body (See Table 3: '*Light to moderate drinking is associated with minimally increased risk of overall cancer. For men who have never smoked, risk of alcohol related cancers is not appreciably increased for light and moderate drinking (up to two drinks per day*').

This is also relevant to the International Alliance for Responsible Drinking (IARD) response, which rejects our finding that they deny that alcohol causes at least one type of cancer. IARD does indeed explicitly point to a link between drinking and cancer. However, as we showed, it also provides information which may be misleading to readers, including stating that there is no increase in risk associated with 'light or moderate' drinking, that the increased risk is 'in general

*The copyright line for this article was changed on 16 February 2018 after original online publication.

associated with heavy drinking' (undefined), or where it appears to imply that alcohol is protective of colorectal cancer in smokers [1]. In response to the point about mechanisms, we coded references in the IARD documents to ethanol, acetaldehyde, and in other places, the role of genetics, and hormone receptor status as potential mechanisms by which alcohol may affect cancer. In the case of hormone receptor status, the mechanism is unclear [2], as stated in the IARD document, but as we noted in our paper, the discussion of unclear mechanisms appears to undermine clearer statements about risk.

The letter from the Portman Group explains further their statement that *'the vast majority of cancer types are not associated with alcohol consumption'*. This is worth highlighting, as this argument increasingly appears in other alcohol industry-related contexts also. The statement is indeed accurate, but in the context of discussion of the risk of cancer from alcohol, meaningless. It is also highly misleading, for the reasons we raise in the paper (i.e. it conflates cancer type with cancer prevalence). As they say, the table in their document does indeed present information on cancer prevalence. However their quote (cited above) does not. To understand why this is misleading, it may be worth considering what an equivalent argument would look like in the case of tobacco, where a statement like '*most cancer types are not caused by smoking'* would be considered to be highly misleading, at best.

The Portman Group response also rejects our statement that there is no discussion of colorectal cancer, by pointing out that it appears in the table in their document. It does indeed appear in that table, but there is no discussion of the risk of colorectal cancer in the 'cancer' section of their document. Where this cancer is mentioned in Section 8.11 of the document, the increased risk appears to be rejected in the section which immediately follows. This begins (incorporating an external quote)—'*However…as for cancer, studies show that for light regular drinkers, the risk is non-existent or minimally increased. The exception is breast cancer…*'. It then goes on to claim that the increased breast cancer risk only applies to women who binge drink, have a low folate intake, or are on hormone replacement therapy. In effect, the Portman document first quotes the Chief Medical Officer's statement about increased risk of a range of cancers, including bowel cancer, and then rejects it in the subsequent paragraph. It is true however that the document we included is the Portman Group's technical response to the public consultation on the revised UK Chief Medical Officer guidelines. We think it is more than reasonable to include this as it is a significant publicly-available statement on alcohol and cancer from a leading alcohol industry SAPRO, and a document which was intended to feed directly into public guidance on safer alcohol consumption.

The Portman Group letter also notes that we incorrectly attributed a quote from Hoek and Zakhari (2014) to the Portman Group. This is true and we are happy to make clear that this quote is part of a Portman Group argument (that is, it is not the Portman Group's own quote—they are using it to support their argument). Their letter also appears to dispute our point about their referencing of independent scientific reviews, pointing out that they cite International Agency for Research on Cancer reviews, for example. Our key point here (as we said in our paper) was that in the section relating to breast cancer, the Portman Group document does not reference the International Agency for Research on Cancer reviews, other systematic reviews, nor the Committee on Carcinogenicity review [3].

In short, while we welcome the minor corrections some of these bodies have made, the findings and contribution of this research remain unchanged. Our analysis builds on existing evidence regarding the activities of SAPROs [4–6], and their clear similarities to tobacco industry tactics, reflecting the inherent conflict of interest. Our findings also show that we need to consider carefully not only the accuracy of that information, but also its contextualisation.

Finally, we are surprised at Drinkaware's statement that our analysis is 'unprofessional'. On the contrary, we consider that the analysis of cancer information disseminated by alcohol industry SAPROs, and the analysis of its accuracy and framing, is not only a professional necessity for public health experts, but is also essential, given the potential impact of such information on the public. Independent professional organisations should welcome such analysis, and we welcome the fact that some of the SAPROs appear to have corrected some of their online material.

Key words: alcohol, cancer

Mark Petticrew[1], Nason Maani Hessari[1], Cécile Knai[1] & Elisabete Weiderpass[2,3,4,5]
[1]Faculty of Public Health and Policy, London School of Hygiene and Tropical Medicine, London, UK, [2]Department of Medical Epidemiology and Biostatistics, Karolinska Institutet, Stockholm, Sweden, [3]Department of Community Medicine, Faculty of Health Sciences, University of Tromsø, The Arctic University of Norway, Tromsø, Norway, [4]Genetic Epidemiology Group, Folkhälsan Research Center, Faculty of Medicine, Helsinki University, Helsinki, Finland, and [5]Department of Research, Cancer Registry of Norway, Institute of Population-Based Cancer Research, Oslo, Norway
Email: mark.petticrew@lshtm.ac.uk

References

[1] Petticrew M, Maani Hessari N, Knai C, Weiderpass E. How alcohol industry organisations mislead the public about alcohol and cancer. Drug Alcohol Rev 2018;37:293–303.

[2] Gross JM, Yee D. How does the estrogen receptor work? Breast Cancer Res 2002;4:62–4.

[3] Portman response to consultation. Response Document No. 11., pp.76–108. Available at: https://www.gov.uk/government/consultations/health-risks-from-alcohol-new-guidelines (accessed 24 December 2016) (pp 24–25, paragraphs 8.19–8.30).

[4] Babor T, Robaina K. Public health, academic medicine, and the alcohol industry's corporate social responsibility activities. Am J Public Health 2013;103:206–14.

[5] McCambridge J, Kypros K, Miller P, Hawkins B, Hastings G. Be aware of Drinkaware. Addiction 2014;109:519–24.

[6] Moodie AR. Big alcohol: the vector of an industrial epidemic. Addiction 2014;109:525–9.